WHAT IS CLAIMED IS:

2

1

- An audio system having reduced clipping effects, comprising: 3 1.
- 4 an audio source producing left and right channel input signals; and
- 5 drive circuitry coupled to said left and right channel input signals and producing a left 6 channel output signal, a right channel output signal, and a common mode output
- 7 signal that are each dependent upon a combination of said left and said right
- 8 channel input signals so that clipping effects are reduced.

9

10 The audio system of claim 1, wherein said left channel output signal and said right 2. 11 channel output signal are dependent upon feedback from said common mode output signal.

□ 12

The audio system of claim 2, further comprising three-wire stereo headphones coupled to 3. said drive circuitry.

The audio system of claim 3, wherein said audio system is a portable audio system. 4.

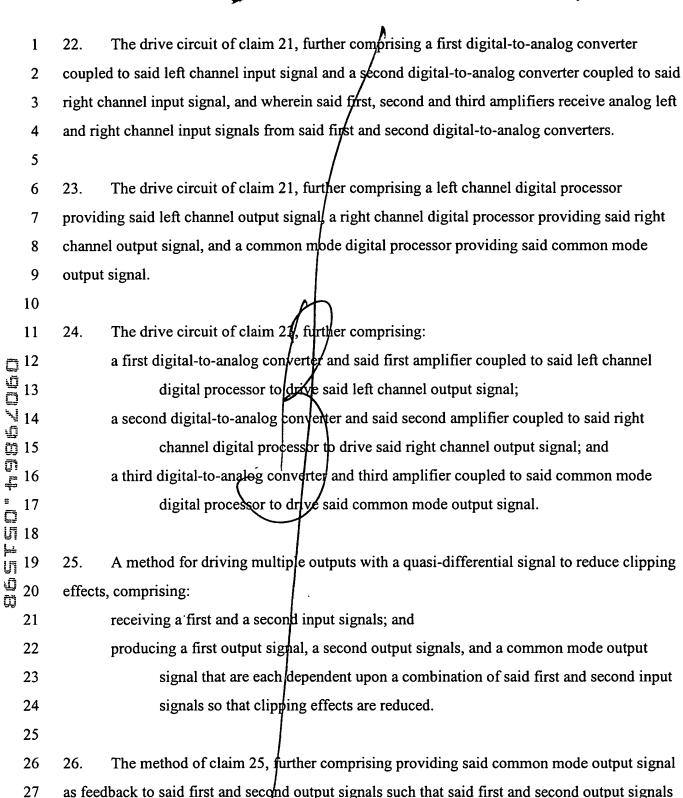
The audio system of claim 2, wherein said left and right channel input signals from said 5. audio source are digital signals.

21 6. The audio system of claim 5, wherein said drive circuitry comprises a first amplifier 22 driving said left channel output signal, a second amplifier driving said right channel output 23 signal, and a third amplifier driving sald common mode output signal.

24

25 The audio system of claim 6, wherein said drive circuitry further comprises a first and a 7. second digital-to-analog converters coupled to said digital left and right channel input signals, 26 27 and wherein said first, second and third amplifiers receive analog left and right channel input 28 signals from said first and second digital-to-analog converters.

The quasi-differential amplifier of claim/11, wherein said first and second analog input 1 14. 2 signals are differential signals and said plurality of amplifiers provide single-ended output 3 signals. 4 The quasi-differential amplifier of claim 11, wherein said first and second analog input 5 15. 6 signals comprise left and right channel audio input signals and said first and second output signals are left and right channel audio output signals. 7 8 9 16. The quasi-differential amplifier of claim 15, wherein said left channel output signal, said 10 right channel output signal, and said common mode output signal are capable of driving three-11 wire stereo headphones. 012 013 14 015 016 17 018 19 00 20 A drive circuit receiving a first and a second input signals and driving a first output 17. signal, a second output signal, and a common mode output signal that are each dependent upon a combination of said first and second input signals so that clipping effects are reduced. The drive circuit of claim 17, wherein said first and second output signals are dependent 18. upon feedback from said common mode output signal. The drive circuit of claim 18, comprising a first amplifier to drive said first output signal, 19. 21 a second amplifier to drive said second output signal, and a third amplifier to drive said common 22 mode output signal 23 24 20. The drive circuit of claim 19 wherein said first and second input signals comprise right 25 and left channel audio input signals. 26 The drive circuit of claim 20, wherein said left and right channel input signals comprise 27 21. 28 digital signals.



2829

are dependent upon feedback from said common mode output signal.

3

7

- The method of claim 25, wherein said first and second input signals comprise a left and 1 27. 2 right channel audio input signals.
- The method of claim 27, wherein said audio input signals are digital signals and further 28. 4 comprising converting said digital audio input signals into analog audio input signals prior to 5 6 said producing step.
- The method of dlaim 27, wherein said first output signal, said second output signal and 8 29. 9 said common mode signals are digital signals and further comprising converting said digital 10 output signals into analog output signals after said producing steps.
 - The thethod of claim 27, further comprising utilizing said left channel output signal, said 30. right changlel output signal, and said common mode output signal to drive three-wire stereo headphones